

⊗ Young men of European ancestry with angle-closure require thorough investigation

The Science behind the Tip

Primary angle closure glaucoma is rare in younger white adults, with an estimated age specific prevalence of 0.02% for those 40-49 years. It is so uncommon in young, white men that they should be thoroughly investigated to identify a cause.

Posterior uveitis and idiosyncratic drug reactions should be excluded. A comprehensive ocular examination is mandatory, and B mode ultrasound and ultrasound biomicroscopy imaging may be useful in identifying mass effects. Asymmetry in anterior chamber depth of more than 0.5 mm indicates that there is probably a secondary, retro-lenticular mechanism. Bilaterally short eyes (typically >1 SD below population mean: i.e. < 22.5 mm for men, < 22.00 for women) suggest “primary” mechanisms, with younger onset triggered by environmental exposures such as antidepressants or adrenergic decongestants.

Angle-closure is linked to Best maculopathy, and Fibrillin-1 mutations in the Marfan/Weill-Marchesani spectrum. A family history of joint laxity and knee/hip replacement surgery is common, and points to collagen abnormalities. Abnormal collagen confers an increased risk in surgery.

References

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2. Chang BM, Liebmann JM, Ritch R. Angle closure in younger patients. *Trans Am Ophthalmol Soc.* 2002;100:201-12; discussion 212-4.